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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS
JULY-AUGUST, 1954

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These results are based upon measurements made at the Naval Observatory on plates secured either there or at the Mt. Wilson Observatory. The symbols used for the entries in the successive columns are as follows:

U.T., the epoch of observation in Universal Time.

No., the identifying number of the group assigned by Mt. Wilson.

Δl , the heliographic difference in longitude from the central meridian, measured positive to the west.

φ , the heliographic latitude, measured positive to the north.

ρ , the heliocentric angular distance from the line joining the centers of the Earth and Sun.

A , the true area of the umbra plus penumbra, expressed in millionths of the visible hemisphere.

s , the number of spots.

An asterisk means that no Mt. Wilson number was assigned. Plates secured at the Naval Observatory are indicated by N, and those at Mt. Wilson by M. The plate quality, which follows, is indicated by:

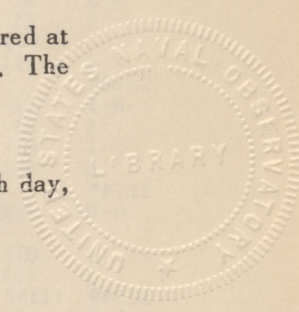
1, Poor; 2, Fair; 3, Good; 4, Very Good; 5, Excellent.

The following five quantities are listed successively at the end of each day, and give for that day:

1. The total number of groups, g .
2. The longitude of the central meridian, L_0 .
3. The latitude of the center of the disc, B_0 .
4. The total value of A .
5. The total value of s .

The mean daily area and the mean relative sunspot number, $r=10g+s$ are given at the end of the month.

These results are a continuation of those published in the *Monthly Weather Review* from February 1, 1927 to December 31, 1947.



JULY

U.T.	No.	Δl	φ	ρ	A	s	U.T.	No.	Δl	φ	ρ	A	s
		°	°	°					°	°	°		
1.535 N-2					0	0	13.545 N-2	11182	+38	+26	43	48	1
	(0) (125)	(+3)			0	0		(1) (326)	(+4)			48	1
2.535 N-3					0	0	14.567 N-2	11183	+33	+1	33	36	2
	(0) (112)	(+3)			0	0		11182	+53	+25	56	97	3
3.623 N-2	11180	-42	-22	47	24	1		(2) (313)	(+4)			133	5
	(1) (97)	(+3)			24	1	15.655 N-3	11182	+70	+25	71	48	1
4.640 N-2					0	0		(1) (298)	(+4)			48	1
	(0) (84)	(+3)			0	0	16.570 N-3	11184	-1	+9	5	12	1
5.541 N-2					0	0		11184	0	+9	5	16	1
	(0) (72)	(+3)			0	0		11184	+1	+9	5	6	1
6.549 N-3					0	0		(1) (286)	(+5)			34	3
	(0) (58)	(+3)			0	0	17.760 N-2	11184	+17	+9	18	24	2
7.646 N-2					0	0		11184	+19	+9	20	16	3
	(0) (44)	(+4)			0	0		(1) (270)	(+5)			40	5
8.828 N-1	11181	+26	+23	33	48	1	18.640 N-2					0	0
	(1) (29)	(+4)			48	1		(0) (259)	(+5)			0	0
9.551 N-3					0	0	19.556 N-2					0	0
	(0) (19)	(+4)			0	0		(0) (247)	(+5)			0	0
10.608 N-3					0	0	20.561 N-2					0	0
	(0) (5)	(+4)			0	0		(0) (233)	(+5)			0	0
11.743 N-1					0	0	21.615 N-3					0	0
	(0) (350)	(+4)			0	0		(0) (219)	(+5)			0	0
12.549 N-2	11182	+23	+26	31	48	1	22.590 N-4					0	0
	(1) (339)	(+4)			48	1		(0) (206)	(+5)			0	0
							23.562 N-2					0	0
								(0) (194)	(+5)			0	0
							24.740 N-2	11185	-68	+9	68	36	2
								(1) (178)	(+5)			36	2

JULY AUGUST

U. T.	No.	Δl	φ	ρ	A	s	U. T.	No.	Δl	φ	ρ	A	s
		$^{\circ}$	$^{\circ}$	$^{\circ}$					$^{\circ}$	$^{\circ}$	$^{\circ}$		
25,577	11185	-57	+ 9	57	12	1	5,581	11186	-28	+26	34	12	2
N-2	11185	-56	+10	56	36	1	M-4	11186	-27	+25	33	6	2
	(1)	(167)	(+5)		48	2		11186	-27	+24	33	6	1
								11186	-27	+26	34	48	6
								11186	-27	+27	34	12	2
26,583	11185	-48	+ 7	48	6	1		11186	-26	+26	33	6	2
N-4	11185	-43	+ 7	43	12	2		11186	-26	+27	33	12	1
	(1)	(154)	(+5)		18	3		(1)	(21)	(+6)		102	16
27,598	11185	-33	+ 8	34	6	1	6,590	11186	-16	+26	26	24	4
N-4							N-4	11186	-15	+24	24	24	4
	(1)	(140)	(+5)		6	1		11186	-15	+26	24	36	3
								11186	-14	+24	23	36	2
								11186	-14	+25	24	48	2
28,601	11185	-20	+ 7	20	12	1		(1)	(8)	(+6)		168	15
N-2	11185	-19	+ 7	19	12	1	7,569	11186	- 4	+26	20	6	1
	11185	-19	+ 5	19	12	1	N-3	11186	- 2	+26	20	36	3
	11185	-17	+ 5	17	6	1		11186	- 1	+25	19	24	2
	(1)	(127)	(+6)		42	4		11186	+ 1	+24	18	36	2
29,619	11185	- 6	+ 9	7	16	3		(1)	(355)	(+6)		102	8
N-2							8,677				0	0	
	(1)	(113)	(+6)		16	3	N-1						
30,553	11185	+ 8	+ 9	9	12	3		(0)	(340)	(+6)		0	0
N-4							9,582	11187	- 7	-23	30	12	1
	(1)	(101)	(+6)		12	3	N-4	11187	- 6	-25	32	6	1
31,625					0	0		11187	- 6	-23	30	24	2
N-2								11187	- 5	-25	32	6	2
	(0)	(87)	(+6)		0	0		11187	- 4	-24	31	16	2
	Mean for 31 days $A=19, =6.3$							(1)	(328)	(+6)		64	8
1,599	11186	-80	+26	80	194	2	10,559	11187	+ 4	-24	31	6	2
N-2							N-3	11187	+ 5	-23	30	24	1
	(1)	(74)	(+6)		194	2		11187	+ 5	-24	31	6	1
2,568	11186	-70	+24	70	145	2		11187	+ 6	-23	30	36	1
N-4								11187	+ 8	-23	31	73	1
	(1)	(61)	(+6)		145	2		(1)	(316)	(+6)		145	6
3,575	11186	-60	+26	63	6	1	11,578	11187	+17	-24	35	12	1
N-3	11186	-57	+23	59	97	2	N-4	11187	+18	-23	34	16	2
	(1)	(48)	(+6)		103	3		11187	+19	-23	35	6	1
4,562	11186	-43	+23	45	97	2		11187	+23	-23	37	109	6
N-2								(1)	(302)	(+6)		143	10
	(1)	(35)	(+6)		97	2	12,680	11187	+30	-24	43	6	1
							N-1	11187	+35	-23	46	109	2
								(1)	(288)	(+7)		115	3
							13,586	11187	+48	-23	56	24	1

AUGUST

U. T.	No.	Δl	φ	ρ	A	s	U. T.	No.	Δl	φ	ρ	A	s
		°	°	°					°	°	°		
N-3							11188	+35	-32	51	16	2	
	(1) (276)	(+7)			24	1	11188	+35	-31	50	48	2	
14.628	11187	+59	-23	64	24	1	11188	+36	-30	51	24	2	
N-3							11188	+36	-32	52	12	2	
	(1) (262)	(+7)			24	1	(1) (143)	(+7)			240	13	
15.837					0	0	24.581	11188	+43	-32	56	73	3
N-2							N-2	11188	+44	-31	57	61	2
	(0) (246)	(+7)			0	0	11188	+48	-30	59	61	3	
16.576					0	0	(1) (130)	(+7)			195	8	
N-4							25.589	11188	+55	-34	66	12	2
	(0) (236)	(+7)			0	0	N-4	11188	+56	-33	67	16	4
17.556					0	0	11188	+61	-32	69	12	3	
N-4							11188	+62	-31	70	6	1	
	(0) (223)	(+7)			0	0	(1) (117)	(+7)			46	10	
18.582					0	0	26.549	11189	-49	-7	52	6	1
N-3							N-5	11189	-47	-6	50	12	1
	(0) (209)	(+7)			0	0	11188	+68	-32	74	6	1	
19.553					0	0	11188	+70	-33	78	16	1	
N-2							(2) (104)	(+7)			40	4	
	(0) (197)	(+7)			0	0	27.626	11189	-33	-6	36	6	2
20.626					0	0	M-4	11189	-32	-5	35	12	3
N-3							(1) (90)	(+7)			18	5	
	(0) (183)	(+7)			0	0	28.787				0	0	
21.585	11188	+5	-30	37	12	2	N-2						
M-4	11188	+8	-32	39	24	2	(0) (75)	(+7)			0	0	
	(1) (170)	(+7)			36	4	29.589				0	0	
22.671	11188	+17	-32	42	97	1	M-3						
N-2	11188	+18	-30	42	73	2	(0) (64)	(+7)			0	0	
	11188	+21	-31	43	85	3	30.623				0	0	
	11188	+23	-32	45	61	2	N-4						
	(1) (155)	(+7)			316	8	(0) (50)	(+7)			0	0	
23.608	11188	+31	-32	48	61	2	31.549				0	0	
N-4	11188	+32	-31	48	73	2	N-3						
	11188	+33	-30	48	6	1	(0) (38)	(+7)			0	0	

Mean for 31 days
 $A=75$, $r=10.9$